



Insulating Firebrick (IFB)

CERAMSOURCE, INC. provides a complete range of insulating firebrick (IFB) that offers unsurpassed performance and value for a wide variety of industries and applications. Many different grades of insulating firebrick are manufactured according to international standards, and are suitable to operate in various conditions and temperatures up to 3000 °F.

IN-23: maximum service temperature of 1260 °C (2300 °F)

IN-26: maximum service temperature of 1427 °C (2600 °F)

IN-28: maximum service temperature of 1538 °C (2800 °F)

IN-30: maximum service temperature of 1649 °C (3000 °F)

Available Sizes and Packagings

Standard Sizes: 9" x 4.5"

Standard Thicknesses: 2.5" and 3"

Standard Quantities: 25 or 20 pieces per carton

Standard Packaging: Cartons or Pallets

Typical Application

- Glass Industries
- Ceramics Industries
- Electrolytic Aluminum Industries
- Iron & Steel Industries
- Non-Ferrous Metals Industries
- Power Generation Industries

Product Characteristics

- Excellent strength at ambient and elevated temperatures
- High cold crushing strength
- Every brick ground to precise dimensions
- Very low levels of iron and other impurities
- Lightweight and energy-efficient
- Lower heat storage than denser refractories
- Heats quickly and economically to operating temperatures
- Cools fast to speed periodic operations

BoilerSupplies.Com

A Division of Power Plus International

To Order Parts & Warranty Information

1-800-780-3776

www.boilersupplies.com

Insulating Firebrick

Typical Physical Properties

Grade		IN-23	IN-26	IN-28	IN-30
Classification Temperature ASTM C155	°F	2300	2600	2800	3000
	°C	1260	1427	1538	1649
Density ASTM C134	lb/ft ³	36	50	55	64
	Kg/m ³	577	801	881	1025
Modulus of Rupture ASTM C133	lb/in ²	124	200	450	220
	MPa	.85	1.38	3.10	1.52
Cold Crushing Strength ASTM C133	lb/in ²	260	320	360	363
	MPa	1.8	2.2	2.5	2.5
Permanent Linear Change ASTM C210 (after heating 24 hours @)	%				
	°F(°C)				
	2246 (1230)	0.0			
	2550 (1399)		-0.4		
	2750 (1510)			-0.09	
2950 (1620)				-1.3	
Thermal Conductivity ASTM C182	Btu-in/ft ² .hr, °F W/mk	1.25	1.88	1.81	2.72
		752 °F			
	400 °C	0.18	0.27	0.26	0.39
	1112 °F	1.39	2.09	2.02	2.93
	600 °C	0.20	0.30	0.29	0.42
	1472 °F	1.60	2.30	2.16	2.30
	800 °C	0.23	0.33	0.31	0.43
	1832 °F	1.81	2.51	2.37	3.07
	1000 °C	0.26	0.36	0.34	0.44

Typical Chemical Composition

	IN-23	IN-26	IN-28	IN-30
Silica - SiO ₂	39.7%	39.1%	31.3%	24.8%
Alumina - Al ₂ O ₃	56.3%	57.2%	65.8%	73.0%
Titania - TiO ₂	1.5%	1.1%	0.8%	0.4%
Iron Oxide - Fe ₂ O ₃	0.7%	0.7%	0.7%	0.7%
Lime - CaO	0.4%	0.5%	0.2%	0.2%
Magnesia - MgO	0.4%	0.4%	0.2%	0.2%
Soda - Na ₂ O	0.1%	0.2%	0.3%	0.1%
Potash - K ₂ O	0.9%	0.8%	0.5%	0.6%

Please contact our sales representative for other brick and size requirements

Data are average results of tests conducted under standard procedures and are subject to variation. Results should not be used for specification purposes. The information, recommendations, and opinions set forth are offered solely for consideration, inquiry, and verification, and are not, in part or total, to be construed as constituting a warranty or representation for which we assume legal responsibility. Nothing contained herein is to be interpreted as authorization to practice patented invention without a license.